

MEMORANDUM

TO:

Greg Davis

Provost and Vice Chancellor for Academic Affairs

FROM:

John F. Katers

Dean, College of Science, Engineering, and Technology

DATE:

April 20, 2018

SUBJECT:

Report on the Mathematics Self-Study Program Review

The Academic Affairs Committee (AAC) met on December 19, 2017, to complete a program review for Mathematics. I examined the self-study report for Mathematics that was prepared by Woo Jeon, Chair of Mathematics, as well as the AAC response to the self-study report. Based on this review I recommend continuation of the Mathematics program with the following comments:

- 1. There has been considerable turnover of tenure-track faculty in the program over the last several years, with the three lecturer positions in the program being more stable. The turnover was a result of a retirement, the promotion of a faculty member to an administrative role, and several resignations. Statistics in particular continues to be a problematic area for recruitment and retention, as the salary range for statistics does not even meet the minimum required to consider foreign nationals in the search. This has led to the program teaching a large number of course with ad hoc instructors or with overloads.
- 2. Despite this faculty turnover, the number of majors has consistently been in the range of 45-55, which is below the high of 83 from the fall of 2008, but has stabilized and increased in the last several years.
- 3. The continuing and recently hired tenure-track faculty are highly productive and have demonstrated themselves to be very capable teachers and researchers. They have been actively engaged in new program development (actuarial science emphasis), the creation of the Math and Stats Club, UW System and campus committee work, and community service activities.



- 4. Mathematics continues to be a significant contributor to general education, with a significant restructuring of lower level mathematics courses completed in 2016-17 and implemented in 2017-18. Having this structure in place will be critical for optimizing the instruction of lower level course in mathematics and the future implementation of the Turbo Charge initiative with the Green Bay Public School District.
- 5. Mathematics supports a number of other majors in the sciences and will be critical to the long-term success of the new mechanical engineering program and existing engineering technology majors. This will place even more pressure on the program going forward, while noting that the proposal for mechanical engineering did include resources for additional faculty in supporting programs.
- 6. Several suggestions were made by the ACC with regard to program assessment. These suggestions should be strongly considered, particularly the need to assess all learning outcomes and include assessment in more courses than just Math 385.
- 7. Other areas of concern were also identified by the AAC, including the low number of underrepresented majors and the potential need for the development of a Mathematics Center. However, without having adequate staffing, focusing on these opportunities for improvement will be an ongoing challenge.

In summary, the mathematics program has done a remarkable job of meeting the many demands in general education and sciences, but will continue to be challenged by the implementation of new programs like engineering that will continue to increase the demand for mathematics courses. Therefore, ensuring adequate staffing is a priority, particularly in statistics where there has been near constant turnover.

cc: Mike Draney, Chair of NAS
Woo Jeon, Chair of Mathematics
Mimi Kubsch, Chair of AAC